

AMENDMENTS TO THE CLAIMS

Listing of Claims:

1. (Currently amended) A method for transformation of potato plants by comprising
 - i) transforming potato plant cells with an expression vector comprising
 - a) ~~regulatory sequences of~~ a promoter active in plants;
 - b) operably linked thereto a DNA sequence encoding a protein with the biological activity of an AHA synthase resistant to inhibitors of potato plant wildtype AHA synthase; and
 - c) operably linked thereto regulatory sequences which serve as transcription termination and/or polyadenylation signals in plants,
 - ii) selecting for AHA synthase inhibitor resistant cells using an imidazolinone type herbicide as a selection agent; and
 - iii) regenerating them the resistant cells to transgenic plants,wherein an antibiotic is not used as a selection agent for selecting the resistant cells.
2. (Previously amended) The method for transformation according to claim 1, wherein the expression vector comprises the DNA sequence of SEQ ID NO: 1.
3. (Currently amended) The method for transformation according to claim 1, wherein the ~~DNA sequence encoding a protein with the biological activity of an AHA synthase resistant to inhibitors of potato plant wildtype AHA synthase is~~ expression vector comprises a DNA sequence selected from the group consisting of
 - a) a DNA sequence comprising the nucleotide sequence of SEQ ID NO: 1;
 - b) a DNA sequence comprising a nucleotide sequence which hybridizes to a complementary strand of the nucleotide sequence of a); and
 - c) a DNA sequence comprising a nucleotide sequence which is degenerate to the nucleotide sequence of a); and
 - d) ~~a DNA sequence being a derivative, analogue or fragment of a nucleotide sequence of a), b) or c) and encoding~~wherein the DNA sequence encodes a protein possessing AHA synthase activity and
conferring confers resistance to AHA synthase inhibitors.

4. (Currently amended) The method for transformation according to claim 1, wherein the promoter is an AHA synthase promoter from ~~Arabidopsis thaliana~~ *Arabidopsis thaliana* or a nos promoter ~~is used~~.
5. (Currently amended) The method for transformation according to claim 1, wherein the terminator is a AHA synthase terminator from ~~Arabidopsis thaliana~~ *Arabidopsis thaliana* or a OCS terminator ~~is used~~.
6. (Cancelled).
7. (Currently amended) The method for transformation according to claim ~~[[6]]~~ 1, wherein ~~for selection~~ the imidazolinone type herbicide is (RS)-2-(4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl)-5-methoxymethylnicotinic acid ~~is used~~.
8. (Previously presented) The plant expression vector according to claim 1 additionally comprising a heterologous DNA sequence.
9. (Previously presented) The plant expression vector according to claim 8, wherein the heterologous DNA sequence encodes a peptide, protein, antisense-, sense-RNA, viral RNA or ribozyme.
10. (Previously presented) The plant expression vector according to claim 9, wherein the heterologous DNA sequence contains information that causes changes in the carbohydrate concentration and the carbohydrate composition of regenerated potato plants.
11. (Previously presented) The plant expression vector according to claim 10, wherein the heterologous DNA sequence contains information that causes increased production of amylopectin type starches.

12. (Previously presented) The plant expression vector according to claim 10, wherein the heterologous DNA sequence contains information that causes increased production of amylose type starches.

13. (Currently amended) A transgenic potato plant cell produced by the method for transformation according to claim 1 ~~and containing~~ wherein the plant expression vector ~~according to claim 1~~ additionally ~~comprising~~ comprises a heterologous DNA sequence.

14. (Previously presented) A transgenic potato plant produced by the method of transformation according to claim 1, wherein the regenerated plant exhibits an elevated resistance to imidazolinone type herbicides.

15. (Previously presented) A harvest product of the transgenic potato plant according to claim 14 comprising the DNA sequence of SEQ ID NO: 1.

16. (Previously presented) The harvest product according to claim 15 wherein the harvest product is a tuber.

17. (Previously presented) Propagation material of transgenic potato plants comprising the DNA sequence of SEQ ID NO: 1.

18. (Previously presented) Potato plant cells, potato tissue cultures, potato plants and/or potato plant breeding comprising the DNA sequence of SEQ ID NO: 1.

19. (Currently amended) A harvest product of the transgenic potato plant according to claim 14 comprising a DNA sequence encoding a protein with the biological activity of an AHA synthase resistant to inhibitors of potato plant wildtype AHA synthase selected from the group consisting of

- a) a DNA sequence comprising the nucleotide sequence of SEQ ID NO: 1;
- b) a DNA sequence comprising a nucleotide sequence which hybridizes to a complementary strand of the nucleotide sequence of a); and

c) a DNA sequence comprising a nucleotide sequence which is degenerate to the nucleotide sequence of a); and

~~— d) a DNA sequence being a derivative, analogue or fragment of a nucleotide sequence of a), b) or c) and encoding a protein possessing AHA synthase activity and conferring resistance to AHA synthase inhibitors.~~